

****This is a Region 5 Targeted Brownfields Assessment Funded Project****

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
FORMER LINCOLN SCHOOL
CHARLESTON, ILLINOIS 61920**

Prepared for:

**United States Environmental Protection Agency
Region 5
25089 Center Ridge Road
Westlake, Ohio 44145**

and

**City of Charleston
520 Jackson Avenue
Charleston, Illinois 61920**

Prepared by:

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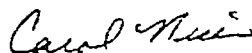
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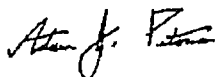
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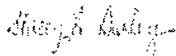
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December 1, 2014

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REGULATORY AND TECHNICAL ACRONYMS

AAI	All Appropriate Inquiries
ACM	Asbestos-containing material
AST	Aboveground storage tank
ASTM	American Society for Testing and Materials
AULS	Activity use limitations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CFR	Code of Federal Regulations
CONSENT	Consent Decrees
CORRACTS	Corrective Action Sites
CREC	Controlled Recognized Environmental Condition
CRS	Control Registry Sites
DOD	Department of Defense
DOT	Department of Transportation
ECHO	Enforcement and Compliance History Online
EDR	Environmental Data Resources
EDR Hist Auto Station	Environmental Data Resources historic automobile stations database
EDR MGP	Environmental Data Resources manufactured gas plants database
ENG CONTROLS	State and local engineering controls sites
EP	Environmental Professional
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FIFRA	Federal Insecticide, Fungicide & Rodenticide Act
FINDS	Facility Index System/Facility Registry System Database
FOIA	Freedom of Information Act
FTTS	Federal Insecticide, Fungicide & Rodenticide Act (FIFRA)/Toxic Substances Control Act (TSCA) Tracking System
GIS	Geographic Information System
HREC	Historical Recognized Environmental Condition
IDOT	Illinois Department of Transportation
IEPA	Illinois Environmental Protection Agency
IL	Illinois
INST CONTROLS	State and local institutional controls sites
ISGS	Illinois State Geological Survey
LBP	Lead-based paints
LQG	Large quantity generator
LUST	Leaking underground storage tank
MSD	Minimum search distance
MSL	Mean sea level
NFA	No Further Action
NFR	No Further Remediation

NFRAP	No Further Remedial Action Planned
NonGen/NLR	Non-generators/No Longer Regulated
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NWI	National Wetland Inventory
OSFM	Office of the State Fire Marshall
PADS	Polychlorinated Biphenyl (PCB) Activity Database
pCi/L	Picocuries per liter
PCB	Polychlorinated biphenyl
RAATS	RCRA Administrative Action Tracking System
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
ROD	Record of Decision
SCRD	State Coalition for Remediation of Drycleaners
SHWS	State Hazardous Waste Listing-Equivalent CERCLIS
SOW	Scope of work
SPILLS	State and Local hazardous material spill database
Sq.ft.	Square feet
SQG	Small quantity generator
SRP	Site Remediation Program
START	Superfund Technical Assessment and Response Team
SVOC	Semivolatile organic compound
SWF/LF	State and local Solid Waste Facility/Landfill database
TBA	Targeted Brownfields Assessments
TDD	Technical Direction Document
TSCA	Toxic Substances Control Act
TSD	Treatment, storage, and disposal
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
UST	Underground storage tank
VEC	Vapor encroachment concern

EXECUTIVE SUMMARY

Tetra Tech, Inc. (Tetra Tech), conducted a Phase I Environmental Site Assessment (ESA) of the former Lincoln School property located at 4 Madison Avenue (hereinafter referred to as the Site) in Charleston, Coles County, Illinois.

This ESA was generally prepared in conformance with *40 Code of Federal Regulations (CFR) Part 312 – Standards and Practices for All Appropriate Inquiries (AAI)*, and the American Society for Testing and Materials (ASTM) Standard E1527-13. The objective of this Phase I ESA is to identify recognized environmental conditions (REC), historical RECs (HREC), and controlled RECs (CREC) that may exist in connection with the Site. The completed Checklist for Phase I ESAs conducted using U.S. Environmental Protection Agency (EPA) Targeted Brownfields Assessment (TBA) Grant Funds is included as **Appendix A** of this report. Any exceptions to or deletions from these practices are described in **Section 5** of this report.

On October 28, 2014, Tetra Tech project manager Mr. Adam Peterca (Tetra Tech) performed the Phase I ESA site visit. Mr. Peterca met Mr. Steve Pamperin and Mr. Alex Winkler of the City of Charleston who provided access to the Site and information on the history of the Site. A private owner currently owns the Site. The Site consists of a single parcel of land, approximately 1.17 acres, Parcel ID# 1510476001 (Alternate Parcel ID #02103969000). The Site consists of a two-story brick masonry building with a partially sunken basement, a one-story sheet metal addition to the main building that abuts the main building to the north, and a lot almost entirely covered by asphalt with a small section of grass. A portion of the southern parapet and roof of the building has collapsed; exposing the interior of the building to the elements. Structural cracks and slightly leaning and twisted exterior walls were also observed in the structure. Water is able to travel throughout the structure, with evidence of water damage (puddles, mold, moss, fungi, etc.) observed throughout the building, from the second floor to the basement. The main building has four access points: on the north, east, and west sides of the building, and an additional access point through the north side of the addition. During the site visit, Tetra Tech observed that all access points were locked, but evidence of break-ins (broken window) and trespassing (graffiti, empty drink containers, etc.) was observed and reported by Mr. Pamperin and Mr. Winkler. The City of Charleston has made efforts to keep the building secured despite the collapse and the dilapidated state of the building infrastructure.

The first floor of the main building consisted of a central hallway, five classrooms (two of which contained bathrooms), stairways at the eastern and western ends of the building, and an entryway staircase. The first floor was in a dilapidated state, with exposed insulation, peeling paint, and falling plaster. Portions of the first floor of the building were inaccessible due to the compromised structural integrity of floors caused by water damage. Fluorescent lights, desks, chairs, tables, and other assorted materials were observed on the first floor of the building. The building contains numerous known areas of asbestos-containing material (ACM). The asbestos content of these materials was outlined in an asbestos management plan used by the school district, which was published in August 1996. This report is included in **Appendix J** of this report.

The second floor of the main building consisted of a central hallway, six classrooms (one of which contained a bathroom), and stairways at the eastern and western ends of the building. The second floor was in a dilapidated state, with exposed insulation, peeling paint, and falling plaster. The ceiling of the south-central classroom (Room 302) was largely collapsed due to the partial collapse of the southern building parapet. This collapse exposed the building to the elements, and Tetra Tech observed significant evidence of water damage throughout the second floor. Portions of the second floor of the building were inaccessible due to the compromised structural integrity of floors caused by water damage. Fluorescent lights, desks, chairs, tables, and other assorted materials were observed on the second floor of the building.

The basement of the building consisted of a central hallway, four classrooms, two large bathrooms/locker rooms, a small bathroom, and a sub-basement, which contained a boiler room and two additional rooms. The basement was also in a dilapidated state, with a large amount of debris present. Debris included

plaster, lumber, wood stain, paint, and furniture. Tetra Tech observed evidence of water damage throughout the basement including puddles, mold, and fungi.

The one-story addition to the main building on site abuts the main building to the north. The addition consisted of a large, open central room, two bathrooms, and a washroom. The addition was in better condition than the main building, but still displayed signs of disrepair and damage, including water damage. Debris was observed throughout the addition, including wood stain, furniture, and assorted construction and building debris. The addition was connected to the basement level of the main building located on the Site.

According to interviews and historical record review, the Site has been occupied since at least 1892. The Site was initially occupied by Western Public School, which appears to have occupied a different building than the building currently on the Site. Western Public School occupied the site from at least 1892 until at least 1910. By 1919, the main building that is currently on the Site (Lincoln School) had been constructed, and the Western Public School building was no longer in existence. This main building is still on the Site today. The addition to the main building on the Site appears to have been constructed between 1975 and 1982. The main building and addition have been unoccupied for approximately 15 to 20 years, and began collapsing around 2009 to 2010.

FINDINGS AND OPINIONS

ASTM defines a REC as: "the presence or likely presence of any hazardous substances or petroleum products on a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." Tetra Tech identified the following RECs for the Site:

- REC I: The known presence of ACM on the Site, as identified in the Asbestos Management Plan from August 1996 (City of Charleston 1996). This plan lists numerous ACM, specifically pipe insulation, thermal material, floor tile, exhaust duct tape, chalkboards, baseboard moldings, floor mastic, fire doors, and ceiling plaster. The report documents both friable and non-friable ACM in varying condition, from good to damaged. The presence of ACM on the Site is considered a REC.
- REC II: The presence of peeling and flaking paint was observed in the main on-Site building. Based on the age of the building, the potential for lead-based paints (LBP) exists on the Site. No sampling was conducted to confirm the presence or absence of LBP. The potential presence of LBP is considered a REC.
- REC III: Surface indications of an underground storage tank (UST) were present on the Site, adjacent to the main building. These indications included a concrete pad and manhole covers. Tetra Tech also observed an abandoned pipe leading in the direction of the suspected UST in the boiler room of the main building on the Site. The presence of a UST in unknown condition with unknown contents is considered a REC.

ASTM defines a historical REC (HREC) as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, activity and use limitations [AUL], institutional controls or engineering controls). Before calling a past release a HREC, the Environmental Professional (EP) must determine whether the past release is a REC at the time the Phase I ESA is conducted (e.g., if there has been a change in the regulatory criteria). If the EP considers this past release to be a REC at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a REC." Tetra Tech did not identify any HRECs for the Site.

ASTM defines a controlled REC (CREC) as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances

allowed to remain in place subject to the implementation of required controls.” Tetra Tech did not identify any CRECs at the Site.

The following *de minimus* conditions were noted based on the current property use and/or surrounding property uses:

- The collapsed state of the building has exposed much of the interior to the elements, as well as causing obvious damage to various elements of the building and its contents. The collapsed and dilapidated state of the building and large amount of associated debris is considered a *de minimus* condition.
- Multiple fluorescent light fixtures were observed throughout the building, which may have PCB-containing ballasts, and/or mercury-containing bulbs. Due to the relatively small quantity, the presence of fluorescent light fixtures and bulbs is considered a *de minimus* condition.

DISCLAIMER

A summary of the RECs identified for the Site is provided in the previous section of this report. The executive summary of this Phase I ESA report is intended to provide a general description of the RECs identified as a result of the Phase I ESA of the Site conducted by Tetra Tech. This section is not intended to be a stand-alone document or to include the basis of all conclusions presented. The report should be read and used in its entirety.

1.0 INTRODUCTION AND SCOPE OF SERVICES

Under Superfund Technical Assessment and Response Team (START) Contract No. EP-S5-13-01, Technical Direction Document (TDD) No. S05-0003-1410-004, U.S. Environmental Protection Agency (EPA) tasked Tetra Tech, Inc. (Tetra Tech), to perform a Phase I environmental site assessment (ESA) at the Lincoln School site in Charleston, Coles County Illinois. The goal of the ESA is to identify recognized environmental conditions (REC) at the subject property.

RECs indicate the presence or likely presence of any hazardous substances or petroleum products in, on, or at a subject property that are (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term REC includes hazardous substances or petroleum products that are under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies (Section 1.1.1 E 1527-13, American Society for Testing and Materials [ASTM] International) (ASTM 2013).

A historical recognized environmental condition (HREC) indicates a past release of any hazardous substances or petroleum products that has occurred in connection with the subject property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the subject property to any required controls (Section 3.2.42 E 1527-13, ASTM) (ASTM 2013). A controlled recognized environmental condition (CREC) is a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (Section 3.2.18 E 1527-13, ASTM) (ASTM 2013).

This ESA is intended to satisfy one of the requirements for the innocent landowner defense, the contiguous property exemption, and the bona fide prospective purchaser exemption to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability: that is, the practices that constitute "all appropriate inquiry into the previous ownership and uses of the subject property consistent with good customary practice," as defined in 42 U.S. Code Section 9601 (35)(B).

The scope of work (SOW), based on the ASTM E 1527-13 *Environmental Site Assessments: Phase I Environmental Site Assessment Process*, is to identify whether RECs are present on the subject property. Phase I ESAs typically are conducted in a four-phase process, including: records review; site reconnaissance; interviews with current owners and occupants of the subject property, and local government agencies; and preparation of a report. A listing of documents used during this investigation is provided in Section 7.0.

Any items listed in the ASTM method that are not specifically identified in the report can be assumed not to be present within the subject property or within such distance to the subject property as to be of potential concern. Any item mentioned but not specifically identified as being a REC can be assumed not to be a REC for the subject property.

As part of this ESA, the City of Charleston provided specialized knowledge regarding RECs associated with the property in the form of an Asbestos Management Plan, dated August 1, 1996 (City of Charleston 1996). In addition, the City of Charleston provided a structural evaluation of the building on the Site, dated September 10, 2014. Copies of these reports can be found in Appendix J. No specialized information was provided regarding environmental liens or activity and use limitations.

This section describes terms and conditions (Section 1.1); limitations, exceptions, and deviations of assessment (Section 1.2); personnel performing ESAs and qualifications (Section 1.3); and user responsibilities (Section 1.4).

1.1 Terms and Conditions

This study and report has been prepared on behalf of and for the exclusive use of the United States Environmental Protection Agency (EPA) Region 5, and the City of Charleston, Illinois (Charleston). EPA Region 5 and Charleston are the only party(s) to whom Tetra Tech has explained the risks involved, and have been involved in the shaping of the scope of services needed to satisfactorily manage those risks, if any.

Accordingly, reliance on this report by any other party may involve assumptions whose extent and nature lead to a distorted meaning and impact of the findings and opinions related herein. Tetra Tech's findings and opinions related in this report may not be relied upon by any party except EPA Region 5 and Charleston, without the consent of EPA Region 5 and Tetra Tech. As such, any use of this document or information contained within by persons or entities other than EPA Region 5 or Charleston, without the express written consent of Tetra Tech, will be at sole risk and liability of said person or entity, and Tetra Tech will not be liable to the EPA, City of Charleston, or such persons or entities, for any resulting damages. It is understood that this document may not include all information pertaining to the Site.

1.2 Limitations, Exceptions, and Deviations of Assessment

Tetra Tech has endeavored to meet what it believes is the applicable standard of care for the services performed and, in doing so, is obliged to advise EPA and Charleston (the users), of any limitations. Tetra Tech believes that providing information about limitations is essential to help clients identify and thereby manage risks. These risks can be mitigated—but not eliminated—through additional research. Tetra Tech will, upon request, advise the users of the additional research opportunities available and associated costs.

This phase I ESA does not include any inquiry with respect to radon, asbestos-containing material (ACM), lead-based paint, lead in drinking water, mold, fungi and microbial growth in building structures in accordance with *ASTM E 1527-13 Appendix X1.8 Exclusion of Certain Constituents of Potential Environmental Concern from CERCLA* (Comprehensive Environmental Response, Compensation and Liability Act). In regards to ACM, Tetra Tech did not conduct any investigation targeting ACM, or any sampling of suspected ACM. However, this ESA addresses ACM based on the August 1996 Asbestos Management Plan provided by the City of Charleston. Tetra Tech does not assume any liability for the contents of this report, and cannot attest to its validity or accuracy. The report is included in **Appendix J**.

This ESA also does not include any inquiry into formaldehyde, methane, endangered species, wetlands, subsurface investigation activities, or other services or potential conditions or features not specifically identified and discussed herein. In those instances where additional services or service enhancements are requested or authorized by the client, specific limitations attendant to those services are presented as a separate document to this report. The findings and opinions conveyed via this Phase I ESA report are based on information obtained at a particular date from a variety of sources enumerated herein, and which Tetra Tech believes are reliable. Nonetheless, Tetra Tech cannot and does not warrant the authenticity or reliability of the information sources it has relied upon.

This report represents Tetra Tech's service to the users as of the report date. In that regard, the report constitutes Tetra Tech's final document, and the text of the report may not be altered in any manner after final issuance of the same. Opinions relative to environmental conditions given in this report are based upon information derived from the most recent property reconnaissance date and from other activities described herein. The users are herewith advised that the conditions observed by Tetra Tech are subject to change. Certain indicators of the presence of hazardous materials may have been latent or not present at the time of the most recent property reconnaissance and may have subsequently become observable. In similar manner, the research effort conducted for a Phase I ESA is limited. Accordingly, it is possible that Tetra Tech's research, while fully appropriate for a Phase I ESA and in compliance with the scope of service, may not include other important information sources. Assuming such sources exist, their information could not have been considered in the formulation of our findings and conclusions.

This report is not a comprehensive property characterization or regulatory compliance audit and should not be construed as such. The opinions presented in this report are based upon findings derived from a property reconnaissance, a review of specified records and sources, and comments made by interviewees. Specifically, Tetra Tech does not and cannot represent that the property contains no hazardous or toxic materials, products, or other latent conditions beyond that observed by Tetra Tech during its property assessment. Further, the services herein shall in no way be construed, designed, or intended to be relied upon as legal interpretation or advice.

Tetra Tech encountered the following limitations during our performance of this ESA;

- Access to portions of the first and second floor was limited due to the degraded structural integrity of flooring.
- Time gaps of more than 5 years were noted in available historical information. Based on the consistent, observed use of the subject property in all reviewed historical information, the presence of time gaps greater than 5 years does not impact Tetra Tech's ability to render an opinion regarding potential RECs.
- Interviews with the current occupant were not conducted because the Site is currently unoccupied, and has been unoccupied for an extended period of time. Based on the consistent observed use of the subject property in all reviewed historical information, the inability to interview the current owner of the subject property does not impact Tetra Tech's ability to render an opinion regarding potential RECs.
- Readily available historical information dating back to the subject property's first-developed use was not available. Based on the consistent observed use of the subject property in all reviewed historical information dating back to 1892, the lack of historical information dating back to the subject property's first-developed use does not impact Tetra Tech's ability to render an opinion regarding potential RECs.

ASTM E1527-13 (Section 4.5.1) acknowledges that "No environmental site assessment can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property." The ESA "[...] is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property, and this practice recognizes reasonable limits of time and cost." Furthermore, the ASTM E1527-13 (Section 4.5.2) states that "There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions" (ASTM 2013).

Tetra Tech performed the Phase I ESA in general conformance with the scope and limitations of the ASTM standard and subject to the conditions and limitations noted herein. Site reconnaissance information is based on the conditions existing on the date of Tetra Tech's visit to the Site. The findings and conclusions presented herein are professional opinions based solely on visual observations of the Site and surrounding areas, and interpretation of information provided or reasonably available to Tetra Tech. Past conditions were considered on the basis of observations, readily available records, interviews, and recollections. Tetra Tech does not warrant or guarantee the correctness, completeness, and/or currency of the information obtained from third parties contained in the environmental record sources and recollections used for this assessment. Such information is the product of independent investigation by parties other than Tetra Tech and/or information maintained by government agencies.

Tetra Tech did not collect samples or perform any testing during the property visit. It is possible that past contamination remains undiscovered or that property conditions will change in the future. Tetra Tech does not warrant or guarantee the property suitable for any particular purpose or certify the property as "clean." Detailed indoor air quality, lead-based paint, vapor intrusion, occupational health and safety, radon, and wetland surveys were not requested nor included as part of this project. Information, limitations, and disclaimers provided in this general section apply to all of the sections included in the remaining report.

1.3 Personnel Performing ESAs and Qualifications

This ESA was completed by the following team of Tetra Tech personnel, whose qualifications are provided in **Section 7.0** of this report:

- Mr. Adam Peterca – Project Manager, Site Assessor, Environmental Professional, Research, Report Preparation
- Ms. Stacey Durley – Senior Technical Reviewer

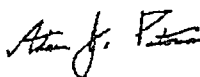
Mr. Adam Peterca is considered an Environmental Professional as defined by 40 Code of Federal Regulations (CFR) Part 312.10, and has undertaken the inquiry as defined in 40 CFR part 312.21 (b). The following is the Environmental Professional certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312.10 of this part. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR part 312.

Adam Peterca

Site Assessor

Title



Signature

December 1, 2014

Date

1.4 User Responsibilities

Section 6 of ASTM E1527-13 outlines the following responsibilities of the user of a Phase I ESA to assist in the identification of potential RECs (ASTM 2013):

- Communication to the environmental professional, by the user, of information relative to any environmental cleanup liens filed or recorded under federal, tribal, state, or local law of which the user is aware (Sections 6.1 and 6.2). *Tetra Tech has not been made aware of any environmental liens filed on the Site.*
- Communication to the environmental professional, by the user, of information relative to any activity and use limitations (AULs) such as engineering controls, land use restrictions or deed restrictions, etc., that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state, or local law of which the user is aware (Section 6.2). *Tetra Tech has not been notified of any such restrictions. Tetra Tech's scope of work did not include a complete review of title information, and no chain-of-title information was provided for review.*
- Communication to the environmental professional, by the user, of any specialized knowledge or experience, or other information that might be material to the identification of RECs (Section 6.3). *Specialized knowledge or experience communicated to Tetra Tech is included in the main body of this report.*

- Communication to the environmental professional, by the user, if the user believes the purchase price of the property is lower than fair market value due to contamination (Section 6.5). *This property is being claimed due to unpaid back taxes; therefore, this requirement is irrelevant to this Phase I ESA.*
- Communication to the environmental professional, by the user, of any commonly known or reasonably ascertainable information within the local community about the property that is material to the identification of RECs (Section 6.6). *Relevant information provided to Tetra Tech by the user is contained in the main body of this report.*
- Communication to the environmental professional, by the user, of the obviousness of the presence or likely presence or threatened releases at the property of which the user is aware, that might be material to the identification of RECs (Section 6.7). *Relevant information provided to Tetra Tech by the user is contained in the main body of this report.*

2.0 PROPERTY DESCRIPTION

This section summarizes information regarding the site and its surrounding properties.

2.1 Property Description, Location, and Property History

Facility Name	Former Lincoln School
Addresses associated with Site	4 Madison Avenue, Charleston, IL 61920
Size of property (acres)	1.17
Latitude/Longitude	39°29'42.32" / 88°10'52.83" (center of Site)
Site and Vicinity General Characteristics	The Site is located in Charleston, Coles County, Illinois. The surrounding area is mixed residential, industrial, and commercial.
Property Description	The Site consists of one two-story building with a partially-sunken basement, and a sheet metal addition on the north end. Site reconnaissance photographs are provided in the photographic documentation log in Appendix C .
Size of building (sq. ft.)	Figure 1 shows the approximate size and location of the building located on the Site. The building is approximately 18,000 square feet (sq. ft.), including the basement. The addition is approximately 1,800 sq. ft.
Construction date of building	The exact date of building construction is unknown. Historical review indicates the building has existed since at least 1919.
Renovation dates and description	The exact date of construction of the sheet metal addition is unknown. Historical review indicates the addition was added between 1975 and 1982.
Building description	The building is constructed of mason (brick) walls with wooden and concrete floors. The building has two stories and a full basement. A section of the southern parapet and roof of the building has collapsed, leaving the interior of the building exposed to the elements.
No. of employees	None
Owned or leased	Non-Responsive
Current property operations/intended use	The Site is currently not in use. The City of Charleston plans to demolish the building. A copy of the Targeted Brownfields Assessment (TBA) Letter indicating this purpose can be found in Appendix B .
Date current operations commenced at facility	Based on interviews with Mr. Steve Pampering and Mr. Alex Winkler, the Site has been unoccupied for a span of 15 to 20 years.
Legal description	The Parcel ID provided by Coles County is 1510476001 (Alternate Parcel ID # 02103969000)

Summary of current and previous property uses and dates of operation		
Based on a review of available records, including city directories, topographic maps, and aerial photos, the current and previous uses and owners (if known) of the Site are as follows:		
Start	End	Description
1892	1919	The Site was in continuous use from 1892 (or earlier) as a public school, known as "Western Public School" in Sanborn Map reports. The Western Public School building appears to be a different building from the building currently located on the Site.
1919	1990s	The Site was operated as a public elementary school, known as "Lincoln School". The building currently on the Site appears in historical

		documentation (Sanborn Map reports) in 1919. Based on interviews with Mr. Steve Pamperin and Mr. Alex Winkler, the building has been vacant since some time in the 1990s. More information on historical property usage can be found in Section 3.2.8 of this report.
1990s	Present	The Site has been vacant for a period of approximately 15 to 20 years.

2.2 Surrounding Properties

Surrounding properties are depicted on **Figure 2**. Photographs of the surrounding properties are provided in **Appendix C**. A summary of the surrounding properties is provided below, as observed during the site visit on October 28, 2014.

Direction	Description
North	The Site is bordered by Madison Avenue to the north, with single-family residences beyond.
East	The Site is bordered by single-family residences to the east, with mixed-use commercial properties and 3 rd Street beyond.
South	The Site is bordered by Monroe Avenue to the south, with single-family residences beyond.
West	The Site is bordered by Division Street to the west, with single-family residences beyond.

3.0 RECORDS REVIEW

This section summarizes site information from previously prepared environmental reports, standard environmental sources, and regulatory agency files.

3.1 Previously Prepared Environmental Reports

Report Title, Prepared For, Prepared By, Date	Description
Lincoln Elementary School Monitoring Prepared for: City of Charleston Prepared by: ESI Consultants, LTD September 10, 2014	ESI Consultants, LTD prepared a report evaluating the structural integrity of the building on the Site. The inspection was performed visually and determined that portions of the building are in danger of further collapse, most notably the southern sections of the second floor and roof. A lack of structural integrity was also described in the floors, roof, and exterior walls of the building.
Charleston Community Unit School District #1 Asbestos Management Plan For Lincoln Elementary School Prepared for: City of Charleston Prepared by: Roy Morris, Jr. August 1, 1996	Mr. Roy Morris, Jr. performed a required 6-month inspection of asbestos-containing materials (ACM) present in the Lincoln School building. Mr. Morris documented the presence and condition of numerous ACM in the building, including pipe insulation, thermal material, floor tile, exhaust duct tape, chalkboards, baseboard moldings, floor mastic, fire doors, and ceiling plaster. The report documents both friable and non-friable ACM in varying condition, from good to damaged.

No previous Phase I ESA reports were made available to Tetra Tech. Mr. Steve Pamperin, of the City of Charleston, did not believe that any previous Phase I ESAs had been performed at the Site. Copies of the documents outlined above can be found in Appendix J.

3.2 Standard Environmental Record Sources

Tetra Tech relied on the following reports provided by Environmental Data Resources, Inc. (EDR) for site information:

- *The Environmental Data Resources, Inc. (EDR) Vapor Encroachment Concerns (VEC) App* – An electronic tool for identifying possible VECs. Potential for VEC status is based on regulatory information, proximity to the Site, and relative elevation to the Site (see Section 3.2.1). A copy of the report generated by the EDR VEC App is included in Appendix J.
- *The EDR Radius Map™ Report with GeoCheck® (The Radius Report)* – An electronic search of the standard environmental record sources. This report contains information obtained from a variety of public and other sources available to EDR. The Orphan Summary contains those sites that could not be mapped due to insufficient addresses. The GeoCheck portion of the Radius Report provides general soil, groundwater, and geology information for the Site and surrounding properties. A copy of the report is provided as Appendix D.
- *The EDR Aerial Photo Decade Package* – Aerial photographs are provided for the Site and are included in Appendix E.
- *The EDR Historical Topographic Map Report* – Topographic maps are provided for the Site and are included in Appendix F.

- *The EDR City Directory Image Report* – The report is generally a summary of information from city directories reviewed at approximately 5-year intervals. A copy of the city directory report is included in Appendix G.
- *Certified Sanborn® Map Report* – Sanborn maps were provided for the subject property and are provided as Appendix H.
- *Chain of Ownership Report* – A chain-of-ownership report was not obtained as part of the scope of work for this Phase I ESA.
- *The EDR Environmental LienSearch™ Report* – An environmental lien report was not obtained as part of the scope of work for this Phase I ESA.
- *The EDR Property Tax Map Report* – A property tax map report was not obtained as part of the scope of work for this Phase I ESA.
- *The EDR Building Permit Report* – A building permit report was not obtained as part of the scope of work for this Phase I ESA.

This section summarizes site and surrounding property information collected from vapor encroachment screens, Radius Reports, orphan sites summary, water and oil/gas well summary, physical setting, aerial photograph review, topographic map review, city directory review, Sanborn map review, chain-of-title review, environmental liens and activity use limitations (AULS), and tax map report and/or building permit reports.

3.2.1 Vapor Encroachment Screen

Tetra Tech completed an initial vapor encroachment screen to determine whether a VEC exists in the subsurface below any existing structures at the subject property from hazardous substances, petroleum, and petroleum products that can include volatile organic compounds (VOC), semivolatile organic compounds (SVOC), and inorganic volatile compounds. The Tier 1 non-invasive vapor encroachment screen was performed for the chemicals of concern and the approximate recommended minimum search distances included in ASTM E 2600-10, *Standard Guide for Vapor Encroachment Screening on Sites Involved in Real Estate Transactions*. The following minimum search distances are outlined in ASTM E 2600-10 (ASTM 2010).

Area of Concern Approximate Minimum Search Distances Surrounding the Subject Property		
Standard Environmental Record Sources (where available)	Chemicals of Concern (miles)	Petroleum Hydrocarbon Chemicals of Concern (miles)
Federal NPL	0.33	0.1
Federal CERCLIS	0.33	0.1
Federal RCRA CORRACTS	0.33	0.1
Federal RCRA non-CORRACTS TSD	0.33	0.1
Federal RCRA Generators	Subject Property Only	Subject Property Only
Federal Institutional Control/Engineering Control	Subject Property Only	Subject Property Only
Federal ERNS	Subject Property Only	Subject Property Only
State and Tribal-equivalent NPL	0.33	0.1
State and Tribal-equivalent CERCLIS	0.33	0.1
State and Tribal Landfill or Solid Waste Disposal Sites	0.33	0.1
State and Tribal LUST	0.33	0.1

Area of Concern Approximate Minimum Search Distances Surrounding the Subject Property		
State and Tribal UST	Subject Property Only	Subject Property Only
State and Tribal Institutional Control/Engineering Control	Subject Property Only	Subject Property Only
State and Tribal Voluntary Cleanup	0.33	0.1
State and Tribal Brownfield	0.33	0.1

Notes:

CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CORRACTS	Resource Conservation and Recovery Act Correction Action
ERNS	Emergency Response Notification System
LUST	Leaking underground storage tank
NPL	National Priorities List
RCRA	Resource Conservation and Recovery Act
TSD	RCRA Treatment, Storage, and Disposal facilities
UST	Underground storage tank

Based on the results of the initial vapor encroachment screening, six properties contaminated with chemicals of concern are identified in the EDR report as being within the minimum search distances for the Tier 1 vapor encroachment screen. In order for a VEC to be present, there must be an established pathway for vapor encroachment to the Site. Generally, an established pathway is in place when there is known soil or groundwater contamination on the Site. The presence of these contaminated mediums on the Site ensures a viable pathway for vapor encroachment to the Site. When soil or groundwater contamination is present on properties other than the Site, it is difficult to establish the presence of a confirmed pathway for vapor encroachment to the Site. As a result, VECs are primarily identified when there is known contamination on the Site, or on properties immediately adjacent. Any identified VECs can only be confirmed through sampling. Based on details contained in their respective databases, none of the sites identified in the vapor encroachment screening process are considered VECs to the Site, primarily due to distance and relative elevation to the Site.

3.2.2 The Radius Report

The Site was not identified on any of the Radius Report databases searched by EDR. However, the Radius Report identified several properties located near the Site. The findings of the Radius Report in the area surrounding the Site are summarized below:

- One Resource Conservation and Recovery Act (RCRA) Small Quantity Generator (SQG) property within a 0.25-mile radius
- Three State and Tribal Landfill and/or Solid Waste Disposal properties within a 0.5-mile radius
- Nine State Registered Leaking aboveground storage tank/ underground storage tank (AST/UST) properties listed on the Illinois EPA Leaking Underground Storage Tank (LUST) database within a 0.5-mile radius
- Six State/Tribal registered AST/UST properties listed on the Illinois Office of the State Fire Marshall UST (Illinois OSFM UST) database within a 0.25-mile radius
- One State and Tribal Engineering Controls property within a 0.5-mile radius
- One State and Tribal Institutional Controls property within a 0.5-mile radius
- Two State and Tribal Voluntary Cleanup Sites listed on the IEPA Site Remediation Program (SRP) database within a 0.5-mile radius
- One EDR-proprietary Manufactured Gas Plant property site within a 1-mile radius
- Three EDR-proprietary U.S. Historical Auto Stations properties within a 0.25-mile radius
- One EDR-proprietary U.S. Historical Cleaners property within a 0.25-mile radius

Based on the information provided by EDR, Table 1 includes details for all sites listed within the ASTM-specified minimum search distance (MSD) for each respective database. Table 1 identifies each site by

name and location, provides a brief summary of the environmental details associated with each site, and includes Tetra Tech's determination of whether each site represents a REC to the Site. More extensive details and a map showing the location of each site listed in the EDR Radius Report is contained in **Appendix D**.

Based on the contents of the Radius Report, Tetra Tech did not identify any RECs, HRECs, or CRECs to the Site. The reason for these determinations can be found in **Table 1**.

3.2.3 Orphan Sites Summary

The Orphan Sites summary included in the Radius Report is a listing of sites that could not be mapped by EDR due to insufficient locational information. Nine orphan sites were identified in the Radius Report. Tetra Tech attempted to locate the properties and determine details of their listings based on additional research. Tetra Tech was able to determine that five of the orphan sites were not RECs based on the conditions of their listings. These sites and the reasons they are not considered RECs are listed below:

- Charleston Concrete: Listed in the IL OSFM UST database, all USTs have been removed
- Charleston Stone: Listed as a RCRA generator of hazardous waste with no RCRA violations
- IDOT Dist 5: Listed in the IL OSFM UST database, and located 0.3 mile from the Site
- IDOT Sta 433 & 84.75: Listed as a RCRA non-generator of hazardous waste with no RCRA violations
- IDOT: Listed as a RCRA non-generator of hazardous waste with no RCRA violations

Tetra Tech was also able to determine that EIU–Lincoln and Stevenson Halls property and the Moore Business Forms property are not RECs because both are located over 1.0 mile from the Site. Tetra Tech was unable to find additional details on the Coles County Laidlaw/ERC property and the Kleanwell property. A listing of the orphan sites can be found in **Appendix D**.

3.2.4 Water and Oil/Gas Well Summary

Information regarding area water wells, which includes water supply wells, groundwater monitoring wells, and oil and natural gas wells, is provided in the Radius Report and shown on the Physical Setting Source Map, included in **Appendix D**. No wells were identified on the Site by EDR. Five wells were identified within 0.5 mile of the Site. Details of the two wells located within 0.25 mile of the Site are provided below, and copies of the Illinois State Geological Survey (ISGS) well logs and reports, where available, are included in **Appendix J**. **Appendix D** presents a full listing of all wells located within 1 mile of the Site.

Well Type/Use	Map ID	Distance (miles)	Relative Elevation	Summary of Information from EDR Report
Engineering Test	A1	0 – 0.125	Lower	Owner: Illinois Department of Transportation Type: Engineering Test Database: IL WELLS Well Log N: 120292396800 Well Depth: 41 feet
Engineering Test	A2	0 – 0.125	Lower	Owner: Illinois Department of Transportation Type: Engineering Test Database: IL WELLS Well Log N: 120292396900 Well Depth: 36 feet

3.2.5 Physical Setting

Information regarding the physical setting of the site is summarized in the table below.

Setting	Description
Topography	The Site is generally flat. According to the Radius Report, the elevation of the Site is approximately 665 feet above mean sea level (MSL), and the general topographic gradient is slightly to the west (EDR 2014e).
Soil	According to the Radius Report, the dominant surficial soil component in the vicinity of the Site is Camden. Camden soil is characterized by a silt loam texture with moderate infiltration rates. The soils are well- and moderately well-drained and have a water table greater than 6 feet (EDR 2014e).
Geology	The stratified sequence at the Site is dated to the Paleozoic era, Pennsylvanian system, and Missourian series (EDR 2014e).
Groundwater and Vapor Migration Potential	Monitoring wells were not observed on the Site, and no specific groundwater information for the Site is available. Groundwater flow is expected to follow the topographical gradient toward the west.
Wetlands	The identified wetland areas are based on Tetra Tech's review of the EDR Radius Report, topographic maps, and aerial photographs; and a site inspection. No potential wetland areas were observed on the Site. The Radius Report identified National Wetland Inventory (NWI) wetland areas within approximately 0.5 mile to the north, south, and southwest; and within 1 mile to the north, south, west, and southwest (EDR 2014e).
Surface Water	According to the Radius Report, the Site is not located within a 500-year floodplain. No 500- or 100-year floodplains are located within 1 mile of the Site (EDR 2014e). No natural or man-made water bodies were observed on the Site.

3.2.6 Aerial Photograph Review

Reasonably available historical aerial photographs depicting development of the property and property vicinity were reviewed at periodic intervals, as summarized below. The EDR Aerial Decade Package (EDR 2014b) is included in Appendix E; a red boundary on each photograph indicates the property location. Tetra Tech reviewed historical aerial photographs for the years 1938, 1975, 1982, 1988, 1994, 1999, 2005, 2006, 2007, 2009, 2010, 2011, and 2012. A summary of information gained from review of historical aerial photographs is presented below.

HISTORICAL AERIAL PHOTOGRAPHIC MAP SUMMARY		
Date	Source of Aerial	Photo ID No./Scale (if available)
1938	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph indicates the 4 Madison Avenue parcel occupied by the main building of Lincoln School, with no evidence of the addition. This aerial photograph appears to indicate that adjoining properties to the north, south, and east are in similar configurations to their current state. The adjoining property to the west appears to be undeveloped. Additional details are difficult to determine due to the resolution of the photograph.		
1975	EDR Aerial Decade Package	1 inch = 1,000 feet
This aerial photograph appears to show the Site and adjoining properties in similar configurations as the previous photograph, although low resolution makes it difficult to distinguish any details.		
1982	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph shows the Site in similar configurations as the previous photograph. This photograph may show the addition on the Site, but low resolution makes it difficult to determine with certainty. Adjoining property to the east now resembles its current configuration, with single-family residences. Low resolution makes it difficult to distinguish meaningful details from this photograph.		
1988	EDR Aerial Decade Package	1 inch = 1,000 feet
This aerial photograph shows the Site and adjoining properties in similar configurations as the previous photograph. Low resolution makes it difficult to determine additional details.		
1994	EDR Aerial Decade Package	1 inch = 500 feet

HISTORICAL AERIAL PHOTOGRAPHIC MAP SUMMARY		
Date	Source of Aerial	Photo ID No./Scale (if available)
This aerial photograph shows the Site and adjoining properties in similar configurations as the previous photograph. The addition appears to be present on the Site.		
1999	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph shows the property and adjoining properties in similar configurations as the previous photograph. Due to improved resolution, the addition is readily apparent on the Site. There are no indications of the partial collapse present on the Site currently.		
2005	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph shows the property and adjoining properties in similar configurations as the previous photograph. Due to the resolution of the photograph, it is not possible to discern whether the building collapse at the Site is documented in this photograph.		
2005	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph shows the property and adjoining properties in similar configurations as the previous photograph. Due to the resolution of the photograph, it is clear that the building collapse at the Site has not yet occurred in this photograph.		
2006	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph shows the property and adjoining properties in similar configurations as the previous photograph. Due to the low resolution of the photograph, it is not possible to discern whether the building collapse at the Site is documented in this photograph.		
2007	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph shows the property and adjoining properties in similar configurations as the previous photograph. It does not appear that the building collapse at the Site is documented in this photograph.		
2009	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph shows the property and adjoining properties in similar configurations as the previous photograph. Due to the low resolution of the photograph, it is not possible to discern whether the building collapse at the Site is documented in this photograph.		
2010	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph shows the property and adjoining properties in similar configurations as the previous photograph. It does not appear that the building collapse at the Site is documented in this photograph.		
2011	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph shows the property and adjoining properties in similar configurations as the previous photograph. It does not appear that the building collapse at the Site is documented in this photograph.		
2012	EDR Aerial Decade Package	1 inch = 500 feet
This aerial photograph shows the property and adjoining properties in similar configurations as the previous photograph. It does not appear that the building collapse at the Site is documented in this photograph.		

3.2.7 Topographic Map Review

Reasonably available historic topographic maps depicting development of the property and property vicinity were reviewed at periodic intervals, as summarized below. Evaluation of topographic maps is controlled by scale and quality. The EDR Historic Topographic Map Report (EDR 2014d) is included in Appendix F. Tetra Tech reviewed the Historical Topographic Maps for the years 1938, 1987, and 1998. A summary of the information gained from review of the historical topographic maps is included below.

HISTORICAL TOPOGRAPHIC MAP SUMMARY		
Date	Source of Topographic Map	Photo ID No./Scale (if available)
1938	EDR Historical Topographic Map Report	Series 15, Scale 1:62,500
The scale of this topographic map does not allow Tetra Tech to provide any specific information regarding the property.		
1984	EDR Historical Topographic Map Report	Series 7.5, Scale 1:24,000
This topographic map appears to show the Site in a configuration similar to its current state, including the presence of the addition to the main building on the Site.		
1998	EDR Historical Topographic Map Report	Series 7.5, Scale 1:24,000
This topographic map appears to show the Site similar to its current configuration, including the presence of the addition on the Site.		

3.2.8 City Directory Review

The EDR City Directory Image Report (EDR 2014c) was reviewed for 4 Madison Avenue, as well as surrounding properties, for which listed names indicate a potential source of environmental impacts. Business directories including city cross-reference and telephone directories were reviewed, if available, at approximately 5-year intervals for the years spanning 1957 through 2013. The historical property addresses of significance are presented below, and a copy of the full EDR City Directory Image Report is included in Appendix G.

HISTORICAL CITY DIRECTORY SUMMARY		
Date	Source of Directory	Photo ID No./Scale (if available)
1957	EDR City Directory Image Report	Not applicable
This city directory does not contain information for the Site. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
1965	EDR City Directory Image Report	Not applicable
This city directory does not contain information for the Site. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
1970	EDR City Directory Image Report	Not applicable
This city directory does not contain information for the Site. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
1976	EDR City Directory Image Report	Not applicable
This city directory does not contain information for the Site. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
1981	EDR City Directory Image Report	Not applicable
This city directory does not contain information for the Site. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
1987	EDR City Directory Image Report	Not applicable
This city directory lists the Site as being occupied by Lincoln Elementary School, indicating that it may have been in operation as a school. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
1992	EDR City Directory Image Report	Not applicable
This city directory does not contain information for the Site. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
1995	EDR City Directory Image Report	Not applicable
This city directory lists the Site as being occupied by Lincoln Elementary School, indicating that it may have been in operation as a school. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
1999	EDR City Directory Image Report	Not applicable

HISTORICAL CITY DIRECTORY SUMMARY		
Date	Source of Directory	Photo ID No./Scale (if available)
This city directory lists the Site as being occupied by Non-Responsive and Schools Community Unit School District No. 1, indicating it was likely owned by the local school district. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
2003	EDR City Directory Image Report	Not applicable
This city directory lists the Site as being occupied by Non-Responsive Non-Responsive Non-Responsive. These individuals were likely private owners of the Site. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
2008	EDR City Directory Image Report	Not applicable
This city directory does not contain information for the Site, indicating it was likely vacant. Nearby parcels are listed as occupied by private owners (likely single-family residences).		
2013	EDR City Directory Image Report	Not applicable
This city directory lists the Site as being occupied by Non-Responsive Non-Responsive is the current private owner of the Site. Nearby parcels are listed as occupied by private owners (likely single-family residences), and by Huck's Food Store.		

3.2.9 Sanborn Map Review

In the late 19th century, the Sanborn Company began preparing maps for use by fire insurance companies. These maps indicate construction materials of specific structures in developed urban areas. With the advent of retail gasoline service stations, the approximate locations of tanks were noted, often without aboveground storage tank (AST) or underground storage tank (UST) designations. These maps were updated and expanded geographically periodically through the early twentieth century. Tetra Tech requested Sanborn Maps from EDR. The EDR Certified Sanborn® Map Report (EDR 2014b) is included in Appendix H. Tetra Tech reviewed the Sanborn Fire Insurance Maps obtained from EDR, Inquiry 4105626.3 for the years 1892, 1896, 1902, 1910, 1919, 1929, 1947, and 1956. A summary of information gained from review of the historical Sanborn® Fire Insurance maps is presented below.

HISTORICAL SANBORN® FIRE INSURANCE MAP SUMMARY		
Date	Source of Sanborn® Map	Photo ID No./Scale (if available)
1892	EDR Certified Sanborn® Map Report	Vol. 1, Sheet 3
This Sanborn map indicates that Western Public School occupied the Site in a building that appears to be different from the building currently on the Site. The adjacent property to the west was occupied by a shed and small residential building. The map does not contain information on other adjacent properties.		
1896	EDR Certified Sanborn® Map Report	Vol. 1, Sheet 4
This Sanborn map indicates similar conditions to the 1893 map at the Site and adjacent property to the west. The adjacent property to the east is now occupied by a small residential building, several small sheds and a carpenter's shop. This map does not contain information on adjacent properties to the north and south of the Site.		
1902	EDR Certified Sanborn® Map Report	Vol. 1, Sheet 4
This Sanborn map indicates similar conditions to the 1896 map at the Site and adjacent properties.		
1910	EDR Certified Sanborn® Map Report	Vol. 1, Sheets 2 and 5
This Sanborn map indicates similar conditions to the 1896 map at the Site and adjacent property to the west. The adjacent property to the east is now also occupied by a paint shop and a small office building. The adjacent properties to the north appear to be occupied by single-family residences. This map does not contain information on adjacent properties to the south.		
1919	EDR Certified Sanborn® Map Report	Vol. 1, Sheets 2 and 5

HISTORICAL SANBORN® FIRE INSURANCE MAP SUMMARY		
Date	Source of Sanborn® Map	Photo ID No./Scale (if available)
This Sanborn map indicates the Site is now occupied by Lincoln Public School, with the main building in similar configuration to the Site's current condition. There is no evidence of the addition on the Site in this map. Adjacent properties to the north and west are in similar configurations to the 1910 map. The adjacent property to the east is now occupied by a small broom factory, several sheds, and a cement block works building. The adjacent properties to the south are occupied by residential buildings and a furniture warehouse.		
1929	EDR Certified Sanborn® Map Report	Vol. 1, Sheet 7
This Sanborn map shows the Site and adjacent properties to the north, south, and west in similar configuration to the 1919 map. Adjacent properties to the east are now occupied by residential buildings.		
1947	EDR Certified Sanborn® Map Report	Vol. 1, Sheet 7
This Sanborn map shows the Site and adjacent properties in similar configuration to the 1929 map.		
1956	EDR Certified Sanborn® Map Report	Vol. 1, Sheet 7
This Sanborn map shows the Site and adjacent properties in similar configuration to the 1947 map.		

3.2.10 Chain-Of-Title

A chain-of-title report was not included in the scope of work for this Phase I ESA, and no chain-of-title information was reviewed.

3.2.11 Environmental Liens and Activity Use Limitations

An environmental lien and activity use limitation search was not included in the scope of work for this Phase I ESA.

3.2.12 Tax Map Report and/or Building Permit Report

A search of tax maps and building permit records was not included in the scope of work for this Phase I ESA.

3.3 Regulatory Agency Files and Record Review

Based on the listings in the Radius Report, a review of pertinent regulatory files and/or records associated with the Site and surrounding areas should be conducted (EDR 2014e). Copies of the Freedom of Information Act (FOIA) letters submitted to the agencies described below can be found in **Appendix I**. Information regarding the Site and properties of particular interest was requested from the following agencies:

3.3.1 State

IEPA – Tetra Tech contacted the IEPA via e-mail on October 30, 2014. Tetra Tech requested information regarding six sites, including the Former Lincoln School site. As of the date of this draft report, Tetra Tech has not received a response from IEPA.

Illinois State Fire Marshal – Tetra Tech contacted the Office of the State Fire Marshal (OSFM) via fax (217-785-0969) on October 30, 2014. Tetra Tech requested information regarding six sites, including the Former Lincoln School site. As of the date of this report, Tetra Tech has not received a response from the IL OSFM.

3.3.2 Additional Environmental Records

City of Charleston – The City of Charleston provided Tetra Tech with an Asbestos Management Plan for the Site, dated August 1, 1996. A copy of this document can be found in **Appendix J**.

4.0 SITE RECONNAISSANCE AND INTERVIEWS

This section summarizes Tetra Tech's site reconnaissance and interview activities, and the information gathered.

4.1 Site Visit

Site Assessor	Adam Peterca (Tetra Tech)
Date of Reconnaissance	October 28, 2014
Methodology Used	Visual inspection and walkthrough of the Site. Visible observation of adjacent properties from publicly accessible areas.
Limiting Conditions	Unable to access portions of first floor and second floor of the main building due to compromised structural integrity of floors and partially collapsed building parapet and roof.

4.2 Interview Records

Name	Steve Pamperin
Employer	City of Charleston
Position	City Planner
Time with Company	10+ years
Time at this Facility	Has checked on the Site since it has been abandoned; never worked at the Site.
Date & Method of Interview	October 28, 2014, in-person interview

Name	Alex Winkler
Employer	City of Charleston
Position	Building Code Official
Time with Company	5+ years
Time at this Facility	Has checked on the Site since it has been abandoned; never worked at the Site. Also attended elementary school at the Site.
Date & Method of Interview	October 28, 2014, in-person interview

4.3 Waste Generation, Permitting, and Utilities

Water	The Site is vacant and is not using water. The City of Charleston provides water to the residents and businesses in the vicinity of the site.
Electricity	The Site is vacant and is not using electricity.
Natural Gas	The Site is vacant and is not using natural gas.
Wastewater	The Site is not generating any wastewater, sanitary, or industrial waste. No leach field was observed on Site. The City of Charleston provides sanitary service to the area.
Storm Water	Based on conditions at the Site, storm water would either move as sheet flow to nearby storm sewers, or could enter the Site through the collapsed portion of the building and accumulate in the basement or percolate into the subsurface.
Air	There are no known air emissions at the Site.
Cooling Towers/Chillers	There are no cooling towers or chillers present at the Site.
Solid Wastes	The Site is vacant; therefore, no solid wastes are currently being generated. There is a large amount of solid waste left behind by past tenants and

	associated with the building collapse. Most solid waste consists of building components (lumber, plaster, etc.) and furniture (desks, tables, chairs, etc.).
Hazardous Wastes	The Site is vacant; therefore, no hazardous wastes are currently being generated. There is potential for hazardous waste due to ACM and potential lead-based paint on the Site.
Waste Disposal Areas	No on-site waste disposal areas were observed during the site reconnaissance.

4.4 Hazardous/Dangerous Materials

Products and Chemicals Used/Managed/Stored	Tetra Tech observed assorted renovation and home repair materials, including paint and wood stain. A propane tank was observed on a camper parked in the parking lot area in the northern portion of the Site.
Products and Chemicals Storage Location	Paint and wood stain were located in several locations within the buildings located on the Site, with the largest stockpile located in the addition.
Storage Tanks	Evidence of an underground storage tank (UST) was observed on the Site. Indications of a possible UST consist of a concrete pad immediately adjacent to the east of the building, with manhole covers typical of a UST. An abandoned pipe leading in the direction of the suspected UST was also observed in the boiler room of the main building on the Site. No evidence of aboveground storage tanks was observed on the Site.
Chlorinated Solvents Used	No chlorinated solvents are used at the Site, as the Site is vacant.

4.5 Additional Observations and Information

Vapor Intrusion	The basement floor of the building showed signs of cracking and shifting, which could provide a pathway for vapor intrusion into the building.
Polychlorinated Biphenyl (PCB)-Containing Equipment	No transformers were observed during the site reconnaissance.
Radon	No known testing has been performed at the Site. An EPA map of radon zones indicates Coles County, Illinois is considered a Zone 1 area. Average radon levels for Zone 1 are greater than 4 picocuries per liter (pCi/L). Air sampling was not performed at the Site to evaluate radon levels.
Asbestos-Containing Materials (ACM)	Numerous areas of ACM are outlined in the Asbestos Management Plan contained in Appendix J . ACM include pipe insulation, thermal material, floor tile, exhaust duct tape, chalkboards, baseboard moldings, floor mastic, fire doors, and ceiling plaster. The report documents both friable and non-friable ACM in varying condition, from good to damaged.
Lead-Based Paint (LBP)	The possibility of LBP exists on the Site based on the age of the on-Site building. Peeling paint was observed throughout the building. No testing was conducted for LBP.
Lead and Drinking Water	According to the EPA Enforcement and Compliance History Online (ECHO) database, the drinking water in the area meets all federal standards.
Fluorescent Lights	Fluorescent light fixtures and bulbs were observed throughout the on-Site building. The majority of the fixtures utilized 4-foot bulbs. None of the lights are in use (electricity is not currently supplied to the Site).
Sumps, Oil/Water Separators	No sumps or oil/water separators were observed during the site reconnaissance.

Monitoring Wells, Vent Pipes, Manhole Covers, etc.	Three manhole covers were observed on the Site. Two of the manhole covers were part of a suspected underground storage tank (UST) located immediately adjacent to the east of the on-Site building. An abandoned pipe leading in the direction of the suspected UST was also observed in the boiler room of the main building on the Site. The third manhole cover was located near the northern border of the Site. Tetra Tech was unable to observe some portions of the Site due to the partial building collapse. Several pipes were noted protruding from the ground in the southern yard portion of the building, but they did not have the characteristics of vent pipes, and appeared to be components of abandoned playground equipment. No vent pipes or monitoring wells were observed on the Site.
Staining	No chemical-related staining was observed on the Site. Much of the floors at the Site were covered in water stains or debris, making observation difficult.
Stressed Vegetation	No stressed vegetation was observed on the Site.
Ponds, Pits, Lagoons, and Debris Piles	No ponds, pits, or lagoons were observed on the Site. A debris pile consisting of construction debris and assorted trash was observed in the central portion of the Site, to the north of the building. Smaller debris piles were observed throughout the building located on the Site, primarily in the basement.
Water Staining or Mold Within Building	Much of the on-Site building showed signs of water staining and mold. Due to the partial building collapse, the interior of the building is exposed to the elements.
Indoor Air Quality Issues (complaints and/or testing)	No indoor air quality issues were observed or reported during the Site reconnaissance. No testing was conducted.
Odors	No strong, pungent, or noxious odors were detected during the Site reconnaissance.
Pools of Liquid	Pools of what appeared to be rainwater were observed in the basement of the on-Site building.
Unidentified Substance Containers	No unidentified substance containers were observed during the Site reconnaissance.
Air Scrubbers	No air scrubbers were observed during the Site reconnaissance.
Sink Holes	No sink holes were observed during the Site reconnaissance.

5.0 EXCEPTIONS, DELETIONS, AND DATA GAPS

Tetra Tech has performed this Phase I ESA in general conformance with the scope and limitations of ASTM E1527-13 for the Former Lincoln School site located in Charleston, Coles County, Illinois (ASTM 2013). Exceptions to, or deletions from this practice or data gaps include the following:

- A chain-of-ownership report was not obtained as part of the scope of work for this Phase I ESA.
- An environmental lien report was not obtained as part of the scope of work for this Phase I ESA.
- A property tax map report was not obtained as part of the scope of work for this Phase I ESA.
- A building permit report was not obtained as part of the scope of work for this Phase I ESA.
- Tetra Tech did not receive any responses to FOIA requests made to IEPA and IL OSFM.
- No interviews were conducted with surrounding property owners.
- Time gaps of more than 5 years were noted in available historical information. Based on the consistent, observed use of the subject property in all reviewed historical information, the presence of time gaps does not impact Tetra Tech's ability to render an opinion regarding potential RECs.
- Readily available historical information dating back to the subject property's first developed use was not available. Based on the consistent observed use of the subject property in all reviewed historical information dating back to 1893, the lack of historical information dating back to the subject property's first developed use does not impact Tetra Tech's ability to render an opinion regarding potential RECs.
- Access to portions of the first and second floors of the main building on site was unavailable due to the partial collapse and compromised structural integrity of the building.
- Tetra Tech did not conduct interviews with the current occupant because the Site is currently unoccupied, and has been unoccupied for an extended period of time. Based on the consistent observed use of the subject property in all reviewed historical information, the inability to interview the current owner of the subject property does not impact Tetra Tech's ability to render an opinion regarding potential RECs.

These exceptions are not thought to have a material impact on the findings and conclusions of this Phase I ESA.

6.0 FINDINGS, OPINIONS, AND CONCLUSIONS

Tetra Tech has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-13 of the Site identified as the former Lincoln School located at 4 Madison Avenue in Charleston, Coles County, Illinois. Any exceptions to, or deletions from, this practice are described in Section 5 of this report.

The Site has been vacant for approximately 15 to 20 years. A portion of the main on-Site building has collapsed, leaving the remainder of the building open to the elements. The most recent known use of the Site was as an elementary school. The Site was used by the Lincoln School dating to at least 1919. Prior to 1919, it was occupied by a different building which housed Western Public School. This building was present on the Site dating to 1892, when earliest records were available.

Based on the information obtained during the Phase I ESA, there is reason to believe a release of hazardous substances or petroleum has or may have occurred on, underlying, or is emanating from the Site. Table 2 describes the RECs identified as part of this Phase I ESA. The following RECs have been identified at the Site:

- REC I: The known presence of ACM on the Site, specifically pipe insulation, thermal material, floor tile, exhaust duct tape, chalkboards, baseboard moldings, floor mastic, fire doors, and ceiling plaster, is considered a REC (City of Charleston 1996).
- REC II: The presence of peeling and flaking paint was observed in the main on-Site building. Based on the age of the building, the potential for LBP exists on the Site. No sampling was conducted to confirm the presence or absence of LBP. The potential presence of LBP is considered a REC.
- REC III: Surface indications of an underground storage tank (UST) were present on the Site, adjacent to the main building. These indications included a concrete pad and manhole covers. An abandoned pipe leading in the direction of the suspected UST was also observed in the boiler room of the main building on the Site. The presence of a UST in unknown condition, with unknown contents is considered a REC.

The following *de minimus* conditions have been identified at the Site:

- The collapsed state of the building has exposed much of the interior to the elements, as well as causing obvious damage to various elements of the building and its contents. The collapsed and dilapidated state of the building and large amount of associated debris is considered a *de minimus* condition.
- Multiple fluorescent light fixtures were observed throughout the on-Site building, which may have PCB-containing ballasts, and/or mercury-containing bulbs. Due to the relatively small quantity, the presence of fluorescent light fixtures and bulbs is considered a *de minimus* condition.

6.1 Additional Investigation

Additional appropriate investigation should be conducted for the Site to detect the presence of hazardous substances or petroleum products if the user of this report requires greater certainty regarding the identified RECs. Tetra Tech recommends the following activities for further investigation and remediation of the Site:

- Conduct asbestos removal, or perform demolition in a manner in which ACM are managed and disposed of appropriately.
- Conduct sampling of flaking paint at the Site to determine whether LBP is present. If LBP is discovered, it should be abated prior to demolition, or demolition should be conducted in a manner to minimize potential lead contamination of the Site.
- Determine the presence, integrity, and contents of potential USTs located on the Site. The presence of USTs can be determined using ground-penetrating radar. If USTs are located using ground-penetrating radar, the USTs should be removed by a licensed contractor and confirmatory soil sampling should be conducted to determine if a leak from the USTs occurred.

7.0 REFERENCES

- American Society for Testing and Materials (ASTM). 2010. *Standard Guide for Vapor Encroachment Screening on Sites Involved in Real Estate Transactions*. E2600-10, West Conshohocken, Pennsylvania.
- ASTM. 2013. *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. E 1527-13. West Conshohocken, Pennsylvania.
- City of Charleston. 1996. Asbestos Management Plan for Lincoln Elementary School. August 1.
- Environmental Data Resources, Inc. (EDR). 2014a. Aerial Photo Decade Package. Lincoln School, Madison Avenue, Charleston, IL 61920. Milford, CT. October 15.
- EDR. 2014b. Certified Sanborn® Map Report. Lincoln School, Madison Avenue, Charleston, IL 61920. Milford, CT. October 15.
- EDR. 2014c. City Directory Image Report. Lincoln School, Madison Avenue, Charleston, IL 61920. Milford, CT. October 15.
- EDR. 2014d. Historical Topographic Map Report. Lincoln School, Madison Avenue, Charleston, IL 61920. Milford, CT. October 15.
- EDR. 2014e. Radius Map™ Report with GeoCheck®. Lincoln School, Madison Avenue, Charleston, IL 61920. Milford, CT. October 15.
- U.S. Environmental Protection Agency (EPA). October 21, 2014. Enforcement and Compliance History Online (ECHO) Database. On-line Address: <http://echo.epa.gov/>
- EPA. Envirofacts Multisystem Database. On-line Address: <http://www.epa.gov/envirofw/>
- Pamperin, Steve and Alex Winkler. In-person interview with Mr. Steve Pamperin, City of Charleston, City Planner and Mr. Alex Winkler, City of Charleston, Building Code Official. Conducted by Adam Peterca, of Tetra Tech Inc., 28 October 2014.

8.0 QUALIFICATIONS

Tetra Tech utilized qualified professional staff trained in performing the scope of work required for this Phase I ESA. The environmental professionals involved in this ESA included a senior technical reviewer and a project manager/site assessor. Their names and qualifications are listed below:

- Project Manager, Site Assessor – Adam Peterca has over 5 years of experience in the environmental field including conducting, reviewing, and managing ESAs. Mr. Peterca has a B.S. in Ecological Engineering and meets the requirements of an environmental professional.

Senior Technical Reviewer – Stacey Durley has over 17 years of experience in the environmental field including conducting, reviewing, and managing Phase I and Phase II ESAs. Ms. Durley has a B.S. in Geology and meets the requirements of an environmental professional